DETAILED ESTIMATE

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- IMPROVEMENTS ROADS AND DRAINS AT MCECHS LAYOUT IN WARD NO-05 BYATARAYANAPURA SUB DIVISION

								Estimation Cost.Rs	**40000000.00**
Sl No	**Description of work**	**Unit**	**Mesurement**				**Qty**	**Rate**	**Amount**
			No.	**L**	**B**	**D**			
1	**Removing B.S Slab of Drain and stacking**(Pg. No. 27 Item No. 5.32) and Pg No.136, Item No.17.4,17.1 (5km lead = 57+2*1.28X5)								
	Drain		Width=Perimeter of Drain in U Shape						
	MCECHS Layout								
	2nd Cross house No. 71-75	Sqm	2	96.00	1.80		345.60		
	3rd Main Road (MCECHS Layout) House No. 62-70	Sqm	2	98.00	1.80		352.80		
		Sqm	2	101.00	1.80		363.60		
	3rd Cross Road House NO. 136-140	Sqm	2	171.00	1.80		615.60		
	4th Main road House No. 84-99	Sqm	2	171.00	1.80		615.60		
	3rd A Main Road	Sqm	1	130.00	1.80		234.00		
	Euro kid pre School Road	Sqm	1	220.00	1.80		396.00		
	Basic rate	99.00							
	Area weightage 6%	5.94							
	5Km lead & Lift= 57+(2*1.28*5)	69.80							
	Sub Total	**174.74**							
	Total						**2923.20**	**174.74**	**510800.00**
2	18.27 KSRRB M200-15.2. Dismantling of existing structures like culverts,bridges, retaining walls and other structure comprising of masonry, cementconcrete, wood work, steel work, including T&P and scaffolding wherevernecessary, sorting the dismantled material, disposal of unserviceablematerial and stacking the serviceable material with all liftsas per specifications. iii)Dismantling Stone Masonry. B. Rubble Stone masonry in cement mortar.No. KBS Pg No 140 ,Item No 18.27, (8km lead = 57+2*1.28X5)								
	SSM Culvert								
	MCECHS Layout								
	2nd Cross house No. 71-75	Cum	2	12.70	0.45	0.50	5.72		
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	2	12.80	0.45	0.50	5.76		
	3rd Cross Road House NO. 136-140	Cum	2	12.50	0.45	0.50	5.63		
		Cum	2	13.20	0.45	0.50	5.94		
	3rd A Main Road	Cum	2	13.20	0.45	0.50	5.94		
	Basic rate	351.00							
	Area weightage 6%	21.06							
	8Km lead & Lift= 57+(2*1.28*5)	69.80							
	Sub Total	**441.86**							
	Total						**28.98**	**441.86**	**12806.00**
3	KSRRB M200-12.2. Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. i) Lime /Cement Concrete. I. By Manual Means :B. Cement Concrete Grade M-15 & M-20. MORTH Specification No. 202. Page No. 139, Item No.18.18 and Pg No.136, Item No.17.4,17.1 (8km lead = 57+2*1.28X5)								
	Deck Slab								
	MCECHS Layout								
	On Drain Slab								
	2nd Cross house No. 71-75	Cum	2	96.00	1.20	0.10	23.04		
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	2	98.00	1.20	0.10	23.52		
	3rd Cross Road House NO. 136-140	Cum	1	171.00	1.20	0.10	20.52		
	Euro kid pre School Road	Cum	1	220.00	1.20	0.10	26.40		
	Culvert Deck Slab								
	2nd Cross house No. 71-75	Cum	1	12.70	2.00	0.23	5.84		

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	1	12.80	2.00	0.23	5.89		
		Cum	1	11.50	2.00	0.23	5.29		
	3rd Cross Road House NO. 136-140	Cum	1	12.50	2.00	0.23	5.75		
		Cum	1	13.20	2.00	0.23	6.07		
	3rd A Main Road	Cum	1	13.20	2.00	0.23	6.07		
	Euro kid pre School Road	Cum	2	13.00	2.00	0.23	11.96		
	Basic rate	557.00							
	Area weightage 6%	33.42							
	8Km lead & Lift= 57+(2*1.28*5)	69.80							
	Sub Total	**660.22**							
	Total						**140.35**	**660.22**	**92665.00**
4	KSRRB 300-1. **Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 &136 ,I No-19.1&17.4& 17.1) (8km lead = 57+2*1.28X5)								
	New Drain								
	MCECHS Layout								
	2nd Cross house No. 71-75	Cum	2	96.00	1.30	1.10	274.56		
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	2	98.00	1.30	1.10	280.28		
		Cum	2	101.00	1.30	1.10	288.86		
	3rd Cross Road House NO. 136-140	Cum	2	171.00	1.30	1.10	489.06		
	4th Main road House No. 84-99	Cum	2	171.00	1.30	1.10	489.06		
	3rd A Main Road	Cum	1	130.00	1.30	1.10	185.90		
	Euro kid pre School Road	Cum	1	220.00	1.30	1.10	314.60		
	3rd Cross Connecting SWD Drain	Cum	2	117.00	1.30	1.10	334.62		
	Desilt								
	3rd A Main Road	Cum	1	130.00	0.50	0.60	39.00		
	Euro kid pre School Road	Cum	1	220.00	0.50	0.60	66.00		
	New Culvert								
	MCECHS Layout								
	2nd Cross house No. 71-75	Cum	1	12.70	2.00	1.00	25.40		
	3rd Main Road (MCECHS Layout)	Cum	1	12.80	2.00	1.00	25.60		
		Cum	1	11.50	2.00	1.00	23.00		
	3rd Cross Road House NO. 136-140	Cum	1	12.50	2.00	1.00	25.00		
		Cum	1	13.20	2.00	1.00	26.40		
	3rd A Main Road	Cum	1	13.20	2.00	1.00	26.40		
	Euro kid pre School Road	Cum	2	13.00	2.00	1.00	52.00		
	3rd Main Connecting to SWD Drain	Cum	1	7.00	1.40	1.15	11.27		
	3rd Cross Connecting SWD Drain	Cum	1	7.00	1.40	1.15	11.27		
	Overburden								
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	2	98.00	0.60	0.45	52.92		
	3rd Cross Connecting SWD Drain	Cum	2	24.00	1.40	1.00	67.20		
	Basic rate	130.00							
	Area weightage 6%	7.80							
	8Km lead & Lift= 57+(2*1.28*5)	69.80							
	Sub Total	**207.60**							
	Total						**3108.40**	**207.60**	**645304.00**

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
5	KSRRB M2100 PCC 1 KSRRB M2100-10. Providing and laying Plain cement concrete of mix1:3:6 with OPC cement @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days Including cost of materials,labour, HOM curing form work, Scaffolding and Centering complete as per specifications.MORTH Specification No. 2100 Pg no:222 Item no:27.18								
	New Drain								
	MCECHS Layout								
	2nd Cross house No. 71-75	Cum	2	96.00	1.30	0.15	37.44		
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	2	98.00	1.30	0.15	38.22		
		Cum	2	101.00	1.30	0.15	39.39		
	3rd Cross Road House NO. 136-140	Cum	2	171.00	1.30	0.15	66.69		
	4th Main road House No. 84-99	Cum	2	171.00	1.30	0.15	66.69		
	3rd A Main Road	Cum	1	130.00	1.30	0.15	25.35		
	Euro kid pre School Road	Cum	1	220.00	1.30	0.15	42.90		
	3rd Cross Connecting SWD Drain	Cum	2	117.00	1.30	0.15	45.63		
	New Culvert								
	MCECHS Layout								
	2nd Cross house No. 71-75	Cum	1	12.70	2.00	0.15	3.81		
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	1	12.80	2.00	0.15	3.84		
		Cum	1	11.50	2.00	0.15	3.45		
	3rd Cross Road House NO. 136-140	Cum	1	12.50	2.00	0.15	3.75		
		Cum	1	13.20	2.00	0.15	3.96		
	3rd A Main Road	Cum	1	13.20	2.00	0.15	3.96		
	Euro kid pre School Road	Cum	2	13.00	2.00	0.15	7.80		
	3rd Main Connecting to SWD Drain	Cum	1	7.00	1.40	0.15	1.47		
	3rd Cross Connecting SWD Drain	Cum	1	7.00	1.40	0.15	1.47		
	Basic rate	5359.07							
	Area weightage 6%	321.54							
	Sub Total	5680.61							
	Total						**395.82**	**5680.61**	**2248500.00**
6	Providing laying plain/ reinforced cement concrete for side Drains Using M20 nominal mix Concrete with OPC at 300kgs. With 20mm and Down size granite metal coarse aggregate at 0.69cum and fine aggregate at 0.43cum Machne mixed, well compacted for wall and Bottom including centering shuttering,cost of materials,HOM of Machinery,Curing Etc.,Complete Excluding cost of Steel as per morth MORTH specification No. 1500, 1700, 2200. Including Cost of material, Labour, HOM complete as per Specification- WALL & Bottom thickness 15Cm(Item No 37.59.2 page no 271)								
	Bottom Raft								
	MCECHS Layout								
	2nd Cross house No. 71-75	Cum	2	96.00	1.10	0.15	31.68		
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	2	98.00	1.10	0.15	32.34		
		Cum	2	101.00	1.10	0.15	33.33		
	3rd Cross Road House NO. 136-140	Cum	2	171.00	1.10	0.15	56.43		
	4th Main road House No. 84-99	Cum	2	171.00	1.10	0.15	56.43		
	3rd A Main Road	Cum	1	130.00	1.10	0.15	21.45		
	Euro kid pre School Road	Cum	1	220.00	1.10	0.15	36.30		
	3rd Cross Connecting SWD Drain	Cum	2	117.00	1.10	0.15	38.61		
	Side Walls								
	MCECHS Layout								
	2nd Cross house No. 71-75	Cum	4	96.00	0.15	0.75	43.20		
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	4	98.00	0.15	0.75	44.10		
		Cum	4	101.00	0.15	0.75	45.45		
	3rd Cross Road House NO. 136-140	Cum	4	171.00	0.15	0.75	76.95		
	4th Main road House No. 84-99	Cum	4	171.00	0.15	0.75	76.95		

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	3rd A Main Road	Cum	2	130.00	0.15	0.75	29.25		
	Euro kid pre School Road	Cum	2	220.00	0.15	0.75	49.50		
	3rd Cross Connecting SWD Drain	Cum	4	117.00	0.15	0.75	52.65		
						Sub Total	**724.62**		
	New Culvert								
	Bottom Raft								
	MCECHS Layout								
	2nd Cross house No. 71-75	Cum	1	12.70	1.80	0.20	4.57		
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	1	12.80	1.80	0.20	4.61		
		Cum	1	11.50	1.80	0.20	4.14		
	3rd Cross Road House NO. 136-140	Cum	1	12.50	1.80	0.20	4.50		
		Cum	1	13.20	1.80	0.20	4.75		
	3rd A Main Road	Cum	1	13.20	1.80	0.20	4.75		
	Euro kid pre School Road	Cum	2	13.00	1.80	0.20	9.36		
	3rd Main Connecting to SWD Drain	Cum	1	7.00	1.20	0.20	1.68		
	3rd Cross Connecting SWD Drain	Cum	1	7.00	1.20	0.20	1.68		
	Side Walls								
	MCECHS Layout								
	2nd Cross house No. 71-75	Cum	2	12.70	0.20	0.60	3.05		
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	2	12.80	0.20	0.60	3.07		
		Cum	2	11.50	0.20	0.60	2.76		
	3rd Cross Road House NO. 136-140	Cum	2	12.50	0.20	0.60	3.00		
		Cum	2	13.20	0.20	0.60	3.17		
	3rd A Main Road	Cum	2	13.20	0.20	0.60	3.17		
	Euro kid pre School Road	Cum	4	13.00	0.20	0.60	6.24		
	3rd Main Connecting to SWD Drain	Cum	2	7.00	0.20	0.75	2.10		
	3rd Cross Connecting SWD Drain	Cum	2	7.00	0.20	0.75	2.10		
						Sub Total	**68.70**		
	SSM Drain								
	Bottom Concrete								
	3rd A Main Road	Cum	1	130.00	0.50	0.10	6.50		
	Euro kid pre School Road	Cum	1	220.00	0.50	0.10	11.00		
	Side Wall Coping Concrete								
	3rd A Main Road	Cum	2	130.00	0.45	0.15	17.55		
	Euro kid pre School Road	Cum	2	220.00	0.45	0.15	29.70		
						Sub Total	**64.75**		
	Basic rate	7002.82							
	Area weightage 6%	420.17							
	Sub Total	7422.99							
	Total						**858.07**	**7422.99**	**6369445.00**
7	KSRB M2200-6 Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. MORTH Specification NO.1600&2200Specification No. Pg No.229 Item No.28.8.2								
	For Drain	Cum	From item no.6				724.62		
		kg	Steel assumed 65Kg/Cum of Concrete				47100.30		
		tonne					47.10		
	For Culvert	Cum	From item No 6				68.70		
		kg	Steel assumed 95Kg/Cum of Concrete				6526.50		

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
		Tonne					6.53		
	Basic rate	75610.0							
	Area weightage 6%	4536.6							
	Sub Total	80146.6							
	Total						**53.63**	**80146.60**	**4298006.00**
8	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	2nd Cross house No. 71-75	Sqm	2	96.00	0.90		172.80		
	3rd Main Road (MCECHS Layout) House No. 62-70	Sqm	2	98.00	0.90		176.40		
	0.00	Sqm	2	101.00	0.90		181.80		
	3rd Cross Road House NO. 136-140	Sqm	2	171.00	0.90		307.80		
	4th Main road House No. 84-99	Sqm	2	171.00	0.90		307.80		
	3rd A Main Road	Sqm	1	130.00	0.90		117.00		
		Sqm	1	130.00	1.20		156.00		
	Euro kid pre School Road	Sqm	1	220.00	0.90		198.00		
		Sqm	1	220.00	1.20		264.00		
	3rd Cross Connecting SWD Drain	Sqm	2	117.00	0.90		210.60		
	Data Rate	**2337.00**							
	Total						**2092.20**	**2337.00**	**4889472.00**
9	Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incha								
	New Culvert								
	MCECHS Layout								
	2nd Cross house No. 71-75	Sqm	1	12.70	1.80		22.86		
	3rd Main Road (MCECHS Layout) House No. 62-70	Sqm	1	12.80	1.80		23.04		
		Sqm	1	11.50	1.80		20.70		
	3rd Cross Road House NO. 136-140	Sqm	1	12.50	1.80		22.50		
		Sqm	1	13.20	1.80		23.76		
	3rd A Main Road	Sqm	1	13.20	1.80		23.76		
	Euro kid pre School Road	Sqm	2	13.00	1.80		46.80		
	3rd Main Connecting to SWD Drain	Sqm	1	7.00	1.20		8.40		
	3rd Cross Connecting SWD Drain	Sqm	1	7.00	1.20		8.40		
	Data rate	**5418.00**							
	Total						**200.22**	**5418.00**	**1084792.00**
10	KSRB 4-1.6 ; Providing and laying in position **plain cement concrete of Mix 1:2:4** with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No-13,I No-4.6)								
	Kerb PCC								
	2nd Cross house No. 71-75	Cum	2	96.00	0.20	0.10	3.84		
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	2	98.00	0.20	0.10	3.92		
		Cum	2	101.00	0.20	0.10	4.04		
	3rd Cross Road House NO. 136-140	Cum	2	171.00	0.20	0.10	6.84		
	4th Main road House No. 84-99	Cum	2	171.00	0.20	0.10	6.84		
	3rd A Main Road	Cum	2	130.00	0.20	0.10	5.20		
	Euro kid pre School Road	Cum	2	220.00	0.20	0.10	8.80		
	3rd Cross Connecting SWD Drain	Cum	2	117.00	0.20	0.10	4.68		
	Basic rate	5688.26							
	Area weightage 6%	341.30							

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Sub Total	**6029.55**							
	Total						**44.16**	**6029.55**	**266265.00**
11	**Removing and resetting of kerb stones**								
	2nd Cross house No. 71-75	m	2	96.00			192.00		
	3rd Main Road (MCECHS Layout) House No. 62-70	m	2	98.00			196.00		
	3rd Cross Road House NO. 136-140	m	2	171.00			342.00		
	4th Main road House No. 84-99	m	2	171.00			342.00		
	3rd A Main Road	m	1	130.00			130.00		
	Euro kid pre School Road	m	1	220.00			220.00		
						Total	**1422.00**		
	30% Missing/Damaged						**427.00**		
	Basic rate	99.00							
	Area weightage 6%	5.94							
	Sub Total	**104.94**							
	Total						**995.00**	**104.94**	**104416.00**
12	Providing and fixing **pre cast solid cement concrete kerb stones** made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete. As per the direction of Engineer incharge. (P.No.27, I.No.5.30 of PW, P&IWTD SR 2018-19)								
	New kerb stone								
	2nd Cross house No. 71-75								
	From Item no. 11			**30% Missing/Damaged**			427.00		
	3rd Main Road (MCECHS Layout) House No. 62-70		2	101.00			202.00		
	3rd A Main Road		1	130.00			130.00		
	Euro kid pre School Road		1	220.00			220.00		
	3rd Cross Connecting SWD Drain		2	117.00			234.00		
						Sub Total	**1213.00**		
	Total length						1213.00		
	No of Kerb Stones	Nos				Total Length/0.45	2695.56		
	Total	Nos					**2696.00**		
	Basic rate	408.00							
	Area weightage 6%	24.48							
	Sub Total	**432.48**							
	Total						**2696.00**	**432.48**	**1165967.00**
13	KSRRB 800-1. **Painting two coats** after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (Page No.180. Iitem no.24.1 of KPWD S.R Bangalore Circle 2018-2019)								
	Kerb Painting								
	2nd Cross house No. 71-75	Sqm	2	96.00		0.40	76.80		
	3rd Main Road (MCECHS Layout) House No. 62-70	Sqm	2	98.00		0.40	78.40		
		Sqm	2	101.00		0.40	80.80		
	3rd Cross Road House NO. 136-140	Sqm	2	171.00		0.40	136.80		
	4th Main road House No. 84-99	Sqm	2	171.00		0.40	136.80		
	3rd A Main Road	Sqm	2	130.00		0.40	104.00		
	Euro kid pre School Road	Sqm	2	220.00		0.40	176.00		
	3rd Cross Connecting SWD Drain	Sqm	2	117.00		0.40	93.60		
	Basic rate	80.00							
	Area weightage 6%	4.80							
	Sub Total	**84.80**							
	Total						**883.20**	**84.80**	**74896.00**

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
14	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading (I No-19.14,P No-143) (8 km lead = 2*1.28X5)								
	Road cut portion								
	MCECHS Layout								
	2nd Cross house No. 71-75	Cum	1	78.00	2.10	0.23	37.67		
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	1	78.00	2.00	0.23	35.88		
	3rd Cross Road House NO. 136-140	Cum	1	138.00	2.20	0.23	69.83		
	4th Main road House No. 84-99	Cum	1	138.00	2.10	0.23	66.65		
		Cum	1	13.00	10.00	0.45	58.50		
	Euro kid pre School Road	Cum	1	180.00	2.10	0.23	86.94		
	2nd main Road house no. 60-42	Cum	1	140.00	2.00	0.23	64.40		
	Basic rate	41.00							
	Area weightage 6%	2.46							
	8Km lead= (2*1.28*5)	12.80							
	Sub Total	**56.26**							
	Total						**419.88**	**56.26**	**23623.00**
15	KSRRB M300- Construction of Embankment with Material Gravel/ Murrum. KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305. (I No-19.60,P No-147)								
	3rd Cross Connecting SWD Drain	Cum	1	117.00	12.70	1.00	1485.90		
	Basic rate	325.00							
	Area weightage 6%	19.50							
	Sub Total	344.50							
	Total						**1485.90**	**344.50**	**511893.00**
16	KSRRB 300-46. Scarifying by mechanical means stone metal crust 50mm to 100mm thick with pick axes along with premix carpet / surface dressing and stacking of old serviceable materials including cost of all labour charges complete as per specifications. MORTH / Chapter 3.No. 19.52 page no.146								
	3rd Main Road (MCECHS Layout) House No. 62-70	Sqm	1	101.00	11.20		1131.20		
	3rd A Main Road	Sqm	1	130.00	11.50		1495.00		
	3rd Cross Connecting SWD Drain	Sqm	1	117.00	12.70		1485.90		
	Basic rate	39.00							
	Area weightage 6%	2.34							
	Sub Total	41.34							
	Total						**4112.10**	**41.34**	**169995.00**
17	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications.(I No-19.64,P No-147)								
	3rd Main Road (MCECHS Layout) House No. 62-70	Sqm	1	101.00	11.20		1131.20		
	3rd A Main Road	Sqm	1	130.00	11.50		1495.00		
	3rd Cross Connecting SWD Drain	Sqm	1	117.00	12.70		1485.90		
	Basic rate	6.00							
	Area weightage 6%	0.36							
	Sub Total	6.36							
	Total						**4112.10**	**6.36**	**26153.00**

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
18	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.(I No-20.5,P No-153)								
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	1	101.00	11.20	0.15	169.68		
	3rd A Main Road	Cum	1	130.00	11.50	0.15	224.25		
	3rd Cross Connecting SWD Drain	Cum	1	117.00	12.70	0.15	222.89		
	Road cut portion								
	4th Main road House No. 84-99								
		Cum	1	13.00	10.00	0.20	26.00		
	Basic rate	1882.00							
	Area weightage 6%	112.92							
	Sub Total	1994.92							
	Total						**642.82**	**1994.92**	**1282365.00**
19	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
	New Road								
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	1	101.00	11.20	0.23	260.18		
	3rd A Main Road	Cum	1	130.00	11.50	0.23	343.85		
	3rd Cross Connecting SWD Drain	Cum	1	117.00	12.70	0.23	341.76		
	Road cut portion								
	MCECHS Layout								
	2nd Cross house No. 71-75	Cum	1	78.00	2.10	0.23	37.67		
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	1	78.00	2.00	0.23	35.88		
	3rd Cross Road House NO. 136-140	Cum	1	138.00	2.20	0.23	69.83		
	4th Main road House No. 84-99	Cum	1	138.00	2.10	0.23	66.65		
		Cum	1	13.00	10.00	0.23	29.90		
	Euro kid pre School Road	Cum	1	180.00	2.10	0.23	86.94		
	2nd main Road house no. 60-42	Cum	1	140.00	2.00	0.23	64.40		
	Basic rate	1888.00							
	Area weightage 6%	113.28							
	Sub Total	**2001.28**							
	Total						**1337.06**	**2001.28**	**2675830.00**
20	KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.158,I.No.21.1)								
	New Road								
	3rd Main Road (MCECHS Layout) House No. 62-70	Sqm	1	101.00	11.20		1131.20		
	3rd A Main Road	Sqm	1	130.00	11.50		1495.00		
	3rd Cross Connecting SWD Drain	Sqm	1	117.00	12.70		1485.90		
	Road cut portion								
	MCECHS Layout								
	2nd Cross house No. 71-75	Sqm	1	78.00	2.10		163.80		
	3rd Main Road (MCECHS Layout) House No. 62-70	Sqm	1	78.00	2.00		156.00		

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	3rd Cross Road House NO. 136-140	Sqm	1	138.00	2.20		303.60		
	4th Main road House No. 84-99	Sqm	1	138.00	2.10		289.80		
		Sqm	1	13.00	10.00		130.00		
	Euro kid pre School Road	Sqm	1	180.00	2.10		378.00		
	2nd main Road house no. 60-42	Sqm	1	140.00	2.00		280.00		
	Basic rate	21.00							
	Area weightage 6%	1.26							
	Sub Total	**22.26**							
	Total						**5813.30**	**22.26**	**129405.00**
21	KSRRB M500-6. Providing and applying **primer coat** with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6)								
		Sqm	From Item No. 20				5813.30		
	For old Road Provide 25% Profile Correction	Sqm	from item no 23 =(12962.10X25%)=3240.53				3240.53		
	Basic rate	32.00							
	Area weightage 6%	1.92							
	Sub Total	**33.92**							
	Total						**9053.83**	**33.92**	**307106.00**
22	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6)								
	For old Road Provide 25% Profile Correction		from item no 23 =(12962.10X25%)=3240.53				12962.10		
		Cum		3240.53		0.05	162.03		
	New Road								
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	1	101.00	11.20	0.05	56.56		
	3rd A Main Road	Cum	1	130.00	11.50	0.05	74.75		
	3rd Cross Connecting SWD Drain	Cum	1	117.00	12.70	0.05	74.30		
	Road cut portion								
	MCECHS Layout								
	2nd Cross house No. 71-75	Cum	1	78.00	2.10	0.05	8.19		
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	1	78.00	2.00	0.05	7.80		
	3rd Cross Road House NO. 136-140	Cum	1	138.00	2.20	0.05	15.18		
	4th Main road House No. 84-99	Cum	1	138.00	2.10	0.05	14.49		
		Cum	1	13.00	10.00	0.05	6.50		
	Euro kid pre School Road	Cum	1	180.00	2.10	0.05	18.90		
	2nd main Road house no. 60-42	Cum	1	140.00	2.00	0.05	14.00		
	Basic rate	6880.00							
	Area weightage 6%	412.80							
	Sub Total	**7292.80**							
	Total						**452.69**	**7292.80**	**3301387.00**
23	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.158,I.No.21.2).								
	MCECHS Layout								
	2nd Cross house No. 71-75	Sqm	1	96.00	10.00		960.00		
	3rd Main Road (MCECHS Layout) House No. 62-70	Sqm	1	98.00	10.90		1068.20		
		Sqm	1	101.00	11.20		1131.20		
	3rd Cross Road House NO. 136-140	Sqm	1	171.00	8.00		1368.00		
	4th Main road House No. 84-99	Sqm	1	171.00	10.00		1710.00		
	3rd A Main Road	Sqm	1	130.00	11.50		1495.00		

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
	Euro kid pre School Road	Sqm	1	220.00	9.40		2068.00		
	2nd main Road house no. 60-42	Sqm	1	171.00	9.80		1675.80		
	3rd Cross Connecting SWD Drain	Sqm	1	117.00	12.70		1485.90		
						Sub Total	**12962.10**		
	Basic rate	5.00							
	Area weightage 6%	0.30							
	Sub Total	**5.30**							
	Total						**12962.10**	**5.30**	**68700.00**
24	KSRRB 500-7. Providing and **applying tack coat** using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-161,I No-21.7)								
		Sqm	From Item No. 23				12962.10		
	Basic rate	12.00							
	Area weightage 6%	0.72							
	Sub Total	**12.72**							
	Total						**12962.10**	**12.72**	**164878.00**
25	Providing and laying Bituminous Concrete 40 mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment , rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications.Clause 507 of MORTH V revision as per IRC SP-53-2015 - using 40-60 TPH capacity HMP with mechanical Paver, Gr-II (30-45mm) with 5.4 % of modified bitumen binder consisting of 4.97% VG- 30 bitumen (60/70 grade) 0.43% Plastomeric Thermoplastics (Waste plastic Additive). (P.No-171I No-21.78.12)								
	MCECHS Layout								
	2nd Cross house No. 71-75	Cum	1	96.00	10.00	0.04	38.40		
	3rd Main Road (MCECHS Layout) House No. 62-70	Cum	1	98.00	10.90	0.04	42.73		
		Cum	1	101.00	11.20	0.04	45.25		
	3rd Cross Road House NO. 136-140	Cum	1	171.00	8.00	0.04	54.72		
	4th Main road House No. 84-99	Cum	1	171.00	10.00	0.04	68.40		
	3rd A Main Road	Cum	1	130.00	11.50	0.04	59.80		
	Euro kid pre School Road	Cum	1	220.00	9.40	0.04	82.72		
	2nd main Road house no. 60-42	Cum	1	171.00	9.80	0.04	67.03		
	3rd Cross Connecting SWD Drain	Cum	1	117.00	12.70	0.04	59.44		
	Basic rate	8061.00							
	Area weightage 6%	483.66							
	Sub Total	**8544.66**							
	Total						**518.48**	**8544.66**	**4430270.00**
26	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	MCECHS Layout								
	2nd Cross house No. 71-75	Sqm	2.5	96.00	0.10		24.00		
	3rd Main Road (MCECHS Layout) House No. 62-70	Sqm	2.5	98.00	0.10		24.50		
		Sqm	2.5	101.00	0.10		25.25		
	3rd Cross Road House NO. 136-140	Sqm	2.5	171.00	0.10		42.75		
	4th Main road House No. 84-99	Sqm	2.5	171.00	0.10		42.75		
	3rd A Main Road	Sqm	2.5	130.00	0.10		32.50		
	Euro kid pre School Road	Sqm	2.5	220.00	0.10		55.00		
	2nd main Road house no. 60-42	Sqm	2.5	171.00	0.10		42.75		
	3rd Cross Connecting SWD Drain	Sqm	2.5	117.00	0.10		29.25		
	Basic rate	429.00							
	Area weightage 6%	25.74							

Sl No	Description of work	Mesurement			Qty	Rate	Amount
		L	B	D			
	Sub Total						
	Total				**318.75**	**454.74**	**144949.00**
						Grand Total	**34999888.00**
						DPR Charges (1% of estimated cost)	**400000.00**
						Project management And Consultancy Charges(1% of estimated cost)	**400000.00**
						GST Charges (12% of estimated cost)	**4199987.00**
						Miscellenious and rounding	**125.00**
						Total Amount	**40000000.00**
							RUPEES FOUR CRORE ONLY

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2018-2019,Issue rates and Data Rates.

Assistant Engineer
BBMP

Assistant Executive Engineer
BBMP

Executive Engineer
BBMP
19/05

RUDRAPRASAD CONSULTANTS
BANGALORE

Technical Sanction
Accorded For R.S.W.M. Scheduled
Head of A/C P3853
CER NO : 06 Dt 19/05/2021
TA CE (YNK)

ADMINISTRATIVE APPROVAL
Accorded For Rs. Four Crores only
Head of A/c P-3853
Div. Ref. No 14 Date 16/11/21
AE 16/11
EE(BTP) 16/11